

Pyramidal, acute, rather ventricose, spirally striated, with a deep suture and with rather broad laminar varices, which are expanded into an acute angle near the suture.

Found by Mr. Cuming in black sand at a depth of four fathoms, at Dumaguete, isle of Negros.

SCALARIA OVALIS, Thes. Conch. part 4. pl. 34. f. 104. *Scal. testâ subovali, lævi; anfractibus paucis, ultimâ magnâ; varicibus novem, crassis, rotundatis; aperturâ ovali, margine incrassato, labio interno incrassato, expanso; colore inter varices pallidè cæruleo.*

The whorls of this very small shell are few in number, the last disproportionately large, with about nine very thick rounded varices; the aperture is oval, with a very thick edge, and the inner lip expanded.

Collected by Mr. Cuming in sandy mud at twenty to thirty fathoms, at Cagayan, province of Misamis, island of Mindinao.

SCALARIA HEXAGONA, Thes. Conch. part 4. pl. 33. f. 67. *Scal. testâ brevi, lævi, imperforatâ; anfractibus contiguïs, varicibus sex, crassis, prominentibus, ad apicem obliquè continuis; aperturâ rotundatâ; colore albo.*

A short, imperforate, white species, with whorls closely united and strong varices, forming about six oblique continuous lines along the spire.

In the cabinet of Mr. Cuming: brought by Col. Moffat from Aca-pulco; found in the sands.

SCALARIA ELENENSIS, Thes. Conch. part 4. pl. 34. f. 102. *Scal. testâ pyramidali, lævi, imperforatâ; anfractibus contiguïs; varicibus sex; ad suturam subplicatis, irregulariter continuis; aperturâ ovali; colore albo.*

Resembling *Sc. unifasciata*, but without any band, and having the varices straighter and not so regularly continuous.

Collected by Mr. Cuming at Punta St. Elena, West Columbia; in sandy mud at six fathoms.

SCALARIA OBTUSA, Thes. Conch. part 4. pl. 33. f. 54. *Scal. testâ ventricosâ, pyramidali, imperforatâ, lævi; anfractibus contiguïs; varicibus numerosis, crassis, rotundatis, continuis, supernè subangulatis; aperturâ rotundatâ, anticè subemarginatâ; labio interno spiraliter recurvo; colore albo.*

Rather short and thick, white, with numerous varices, which continue on the spire from whorl to whorl, and are slightly angular above; the inner lip of the aperture is spirally twisted, and forms an undulated notch at its juncture with the outer lip.

Collected by Mr. Cuming at Punta St. Elena, West Columbia; in sandy mud at six fathoms.

SCALARIA MINDOROENSIS, Thes. Conch. part 4. pl. 34. f. 91. *Scal. testâ pyramidali, lævi, imperforatâ, tenui; anfractibus vix separatis; varicibus numerosis, simplicibus, ad suturam subirregulariter junctis; colore albo.*

A small, white, thin shell, slightly resembling *Sc. obliqua*, but less

oblique, and with more numerous and prominent varices; the whorls are contingent.

Found by Mr. Cuming on the sands at Puerto Galero, island of Mindoro.

SCALARIA POLITA, Thes. Conch. part 4. pl. 34. f. 99. *Scal. testâ tenui, elongatâ, lævi, imperforatâ; anfractibus numerosis, vix prominentibus; varicibus subnumerosis, tenuibus, in medio anfractuum obsoletis; colore pallidè griseo.*

The whorls are numerous and not very prominent; the varices appear as if worn away in the middle of the whorls.

Collected by Mr. Cuming at Xipixapi, West Columbia; in sandy mud at ten fathoms.

SCALARIA STATUMINATA, Thes. Conch. part 4. pl. 35. f. 127. *Scal. testâ parvâ, crassâ, brevi, lævigatâ, imperforatâ; anfractibus contiguâ, vix prominentibus, anticè lined elevatâ cinctis; varicibus quinque, prominentibus, ad apicem continuis; anticè crassis, posticè in angulum elevatum expansis; aperturâ subrotundâ, labio externo anticè tenui; colore inter varices cæruleo.*

A small, short, thick species, with very prominent ribs, which are elevated and expanded into a broad angle at the upper part of the whorls and very thick at the lower; they are united with each other so as to form five oblique prominent ridges up the spire.

Collected by Mr. Cuming at Payti, Peru; in black sand at seven fathoms.

SCALARIA BICARINATA, Thes. Conch. part 4. pl. 35. f. 113, 114. *Scal. testâ subcylindricâ, elongatâ, imperforatâ, minutè cancellatâ; anfractibus sex, latis, ad latera planis, ad suturam crenulatis, ultimo carinis binis in medio cincto; aperturâ ovali, margine crasso, minutè crenulato; colore ferè albo.*

A very curious little shell, with crenulated suture and two prominent keels in the centre of the last whorl; the edge of the aperture is much thickened.

Found by Mr. Cuming in coarse black sand at seven fathoms, at Dumaguete, isle of Negros.

SCALARIA FUSCA, Thes. Conch. part 4. pl. 35. f. 138. *Scal. testâ elongatâ, imperforatâ, spiraliter minutissimè striatâ; anfractibus 12, subprominentibus, ultimo carinâ lineari anticè cinctâ; varicibus tenuissimis, obliquis, ad suturam flexuosis; aperturâ subovali, margine tenui; colore obscurè fulvo, flammulis fuscis obliquis inter varices seriatim picto.*

An elongated species, with a very narrow but distinct keel on the lower part of the last whorl; the varices are very thin, and bent in near the suture. The shell is finely striated and prettily marked with flame-like patches of dark colour between the varices. There are two specimens in Mr. Cuming's collection, which were found on sand at Sierra Leone.

SCALARIA ACUMINATA, Thes. Conch. part 4. pl. 35. f. 130. *Scal. testâ elongatâ, imperforatâ, acuminatâ; anfractibus 15, vix prominentibus, anticè carinâ tenui cinctis; varicibus creberrimis,*

numerosis, tenuibus, curvilineatis; aperturâ ovali, margine tenui, labio interno tortuoso; colore pallidè fulvo, fasciis duabus, und prope suturam pallidâ, und in medio anfractuum latâ, distinctâ.

Elongated, keeled, with numerous whorls, and very numerous close-set curvilinear varices.

Found by Mr. Cuming in sandy mud at seven fathoms at Malacca.

Mr. Gould laid before the Meeting specimens of three new species of Mammalia, which he described as

HALMATURUS HOUTMANNII. *Hal. Mas facie canescenti-cinereâ, fronte rufescente, spatio inter aures auribusque externè nigrescenti-cinereis; lineâ nuchali nigrescenti-fuscâ; dorso saturatè fusco griseo irrorato, colli corporisque lateribus, artubus anticis et posticis rufis, gutture et pectore fulvescenti-albis, abdomine cinereo; caudâ canescente, supernè et ad apicem nigrescente.*

Fœmina mari assimilis, coloribus pallidioribus. Juniores nigrescenti-cinerei, colore apud dorsum saturatiore.

Adult Male.—Face dark grizzled grey, stained with rufous on the forehead; external surface of the ear and the space between the ears dark blackish grey; sides of the neck, shoulders, fore-arms, flanks and hind-legs rufous, which colour is palest on the flanks; a line of obscure blackish brown passes down the back of the neck, and spreads into the dark grizzled brown of the back; throat and chest buffy white; under surface of body grey; tail grizzled grey, deepening into black on the upper side and the extremity; the fur is somewhat short, coarse and adpressed; the base bluish grey, succeeded by rufous, then white, and the extreme tip black. Weight $12\frac{1}{2}$ lbs.

Adult Female.—Is similar in colour to the male, but of a more uniform tint, in consequence of the rufous colouring of the shoulders and flanks being paler, and the grizzled appearance of the back not so bright. Weight 8 lbs.

The young is dark grizzled grey, approaching to black, particularly along the back. Weight 5 lbs.

	Adult Male.		Female.	
	Ft.	In.	Ft.	In.
Length from the nose to the tip of the tail ..	3	6	3	4
——— of tail	1	$2\frac{1}{4}$	1	2
——— of tarsus and toes, including the nail ..	0	$5\frac{3}{4}$	0	$5\frac{3}{8}$
——— of arm and hand, including the nails ..	0	6	0	4
——— of face from the tip of the nose to the base of the ear	0	$4\frac{1}{2}$	0	4
——— of ear				

HALMATURUS DAMA. *Hal. vellere fusco, canescente, rubescente ad nucham, ad dorsum imum, et per artus anticos; facie cinereâ rufo lavatâ; fronte spatio inter aures, auribusque externè nigrescenti-cinereis; artubus posticis pallidè fuscis; caudâ canescente, corpore inferiore pallidè cinereo.*

General colour of the fur grizzled brown, becoming of a reddish tint on the back of the neck, arms and rump; face grey, washed with rufous on the forehead; outside of the ears and the space between

blackish grey; hinder legs light brown; tail grizzled grey; under surface of the body pale grey.

	Ft.	In.
Length from the nose to the extremity of the tail	2	11
——— of tail	1	$2\frac{1}{2}$
——— of tarsus and toes, including the nail	0	$5\frac{3}{4}$
——— of arm and hand, including the nails	0	$4\frac{1}{4}$
——— of face from the tip of the nose to base of ear	0	4
——— of ear	0	$2\frac{1}{2}$

This animal is closely allied to and is nearly the same size as *H. Thetidid*, but has much larger ears, and the fur much more dense and lengthened; the base of the fur is bluish grey, to which succeeds reddish brown, then silvery white, the extreme tips being black.

The above is the description of a female; the male will doubtless prove to be of larger size.

It is very numerous on the islands of the Houtmann's Abrolhos, and also inhabits Western Australia, where it is called 'Dama' by the aborigines.

LAGORCHESTES HIRSUTUS. *Lag. arenaceo-fulvus, dorso griseo irrorato; spatio circumoculari conspicuè rubescenti-fulvo; auribus mediocribus, externè cinereo-fuscis, intùs pilis albidis obsitis, pedibus flavescenti-fulvis.*

General colour of the fur, particularly on the hind quarters and under surface, rich sandy buff; that of the head and back having a grizzled appearance, occasioned by each hair having a mark of greyish white near the tip; the fur, which is exceedingly soft, is blackish brown at the base, then rufous, the whole beset with numerous hairs, which gradually increase in length towards the lower part of the body, where they exceed the general length of the fur by nearly two inches, and being of a rich rufous tint, give the animal a very conspicuous appearance; broad space round the eye reddish buff; ears moderately large, greyish brown externally, and clothed with whitish hairs within; feet nearly uniform yellowish buff.

	Ft.	In.
Length from tip of nose to tip of tail	2	$3\frac{1}{2}$
——— of tail	0	$10\frac{1}{2}$
——— of tarsus and toes, including nail	0	$5\frac{1}{4}$
——— of arm and hand, including nails	0	$2\frac{3}{4}$
——— of face from tip of nose to base of ear	0	$3\frac{3}{8}$
——— of ear	0	$1\frac{3}{4}$

The above is the description of a male, from the York district of Western Australia, where it is called by the aborigines 'Woo-rup.' It is a very beautiful and well-marked species, distinguished from every other member of its genus by the long reddish hairs of the rump. The extreme tip of the tail is white, but whether this character is constant or not is at present unknown.

At the request of the Chairman, Mr. Gould read the following extracts from a letter he had received from Mr. Gilbert, describing the habits, &c. of some Mammalia and Aves of Western Australia:—

"With respect to the Kangaroos, I have heard of the little silver-

haired *Lagorchestes* (*Lagorchestes albipilis*), and have tried hard to procure a specimen; it is a species well known to the natives of Moore's river, by whom it is called 'Nar-nine,' and is only to be found in densely thick scrub on flats, and on the edges of swamps where the small brush *Melaleuca* grows so thickly that it is almost impossible for a man to force his way through; its runs being under this, the animal escapes even the quick eye of a native. The only possible means of obtaining it is by having a number of natives to clear the spot, and two or three with guns and dogs to watch for it.

"This beautiful little animal makes no nest, but squats precisely like a hare, as I have been assured by Mr. Johnson Drummond. Of the other species with white behind the ears I can learn very little: are you satisfied it is not a variety? I have seen many with white spots about different parts of the head, which is said by all the hunters to be a common occurrence; the only character which appears to me to approach a specific difference is the redness of colouring, which has been often observed by hunters; the woolly nature of the fur is only the winter covering common to all of them.

"The grey kangaroo, *Macropus Ocydromus*, Gould, of which I have a very interesting series, has very thin hair in summer, while in winter the coat is thick and woolly.

"The male is called *Yoon-gur* and the female *Work* by the aborigines. This large kangaroo is tolerably abundant over the whole colony of Western Australia, from King George's Sound, south, to forty miles north of Moore's river, the farthest point I have reached; it does not appear to confine itself to any peculiar description of country, being as often seen in the gum-forests, among hills, as on the open plains and clear grassy hillocks; it is however more numerous in the open parts of the country, where it is not so liable to surprise. In travelling from Guilford to York, from two to four or five may occasionally be met with; but farther in the interior, particularly at Gwangum plains, herds of thirty to fifty may often be met with: further south, beyond Kojenup, they are still more numerous; in fact, I have never seen in any part of Australia so large a herd as the one I met with on the Gordon plains in 1840; at the most moderate calculation there could not have been less than five hundred kangaroos; several of the party, in their astonishment, considered there were even a greater number than I have stated.

"The large full-grown male is termed a Buck or Boomer, and attains a great size, when he becomes a most formidable opponent to the best dogs in the country, few of which will ever run a large Boomer; this may in some degree account for the few instances of very large ones being killed. It is not by their greater speed that they are enabled to escape; on the contrary, their great weight in some measure incapacitates them for running fast, or to any great distance, so that almost any dog may overtake them; instead, therefore, of running away, the Boomer invariably turns round and faces his pursuers, erecting himself to his full height, if possible with his back against a tree, and thus awaits the rush of the dogs, endeavouring to strike them with his powerful hind-toe, or catching them in

his fore-arms, and while thus holding them, inflicting dreadful and often fatal wounds with his foot. Old dogs well broken in, and accustomed to hunting the Boomer, will keep him at bay by their barking till the hunter comes up, who is generally furnished with a short heavy stick, and with a blow or two on the head brings the animal down. Even the hunter often runs a hazard, for a Boomer will frequently, on the approach of man, leave the dogs and attack his new opponent most fiercely; and at times it is no easy matter to avoid being severely cut in attempting to kill it. When closely pursued it takes to the water, and as the dogs approach, catches them in its arms and holds them under him till drowned. If the water be too shallow for drowning them, it has been known to catch one dog and place it beneath its feet, while courageously waiting the approach of a second. The swiftest runner is the female of the first year before having young, and of the second year with her first young; at this age her speed is so great that she is termed the 'Flying Doe': if she obtains anything like a fair start, she will give the fleetest dogs a long and severe run, and will frequently succeed in outstripping them; upon finding herself too closely pressed she attempts to evade the dogs by making a sudden leap, almost at a right angle with her course, and the dogs, not unfrequently when very close to her, and at full speed, bound past her to such a distance, that by the time they regain the track the kangaroo has gained so much ground as to get fairly away; but this stratagem often accelerates her death, for in turning off so suddenly the whole weight is thrown upon one limb; the leg is consequently broken, the animal falls, and the next moment becomes an easy prey. Even large bucks are sometimes taken in this way: in their flight and anxiety to escape the dogs, they often run against a stump or a tree with such violence as to be killed on the spot.

"It would scarcely be supposed, from seeing this animal in confinement, where it appears so quiet and harmless, that it can be excited to rage and ferocity; yet such is the case in a state of nature. Upon finding itself without a chance of escape, it summons up all its energies for a last struggle, and would often come off victor if it had dogs alone to contend with: the moment it sees the approach of man, it appears to know instinctively that he is its most formidable opponent; its lips are then curved and contracted; its eyes sparkle with rage, and seem ready to start from their sockets; its ears are in rapid and constant motion, and it utters its peculiar though not loud voice—a sort of smothered grunt, half hiss or hard breathing; its attention is totally withdrawn from the dogs to its new enemy; regardless of their rush, it loses its former advantage; and the dogs having once fairly got hold, the animal is easily brought down.

"If a female with a tolerably large young one in the pouch be pursued, she will often, by a sudden jerk, throw the little creature out: whether this is done for her own protection, or for the purpose of misleading the dogs, has been debated by hunters; I am inclined to think the former is the case, for I have observed that the dogs

pass on without noticing the young one, which in general crouches in a tuft of grass, or hides itself among the scrub without attempting to run or make its escape: the mother, if she eludes her pursuers, doubtless returns for her offspring.

“The kangaroos inhabiting the forests are invariably much darker and have a thicker coat than those of the plains; the young are at first of a very light fawn-colour, and get darker until two years old; from this age they again become lighter in colour, and the old males become of a very light grey; the coat, as already mentioned, being in the summer thin and hairy, and in the winter of a more woolly character. It is no unusual occurrence to find them with white marks on the head, particularly a white spot between the eyes or on the forehead; in one instance I observed the whole of the throat, cheeks, and upper part of the head spotted with yellowish white. Albinos have been frequently met with. The largest and heaviest kangaroo of this species, of which I have any authentic account, was killed at the Murray, and weighed 160 lbs.*”

“*Halmaturus manicatus*:—Brush and Blue Kangaroo of colonists; *Goorh-a*, aborigines of Perth; *Quarra*, aborigines of the interior.

“This is by far the swiftest and most difficult kangaroo to procure with dogs, not only from its fleetness, but also from the zigzag manner of its successive leaps and the thick brush which it inhabits; it is very rarely seen in the open country, dwelling in scrubby districts, and the facility with which it bounds off and rounds the clumps of bushes, enables it to make its escape with comparative ease: during the heat of the day it may be seen under the shade of a tree or thick clump of bushes, and may be often approached within a few yards before it bounds from its cover, thus affording a tolerably easy shot. Weight from 17 to 21 lbs.”

“*Anous stolidus*.—The Noddy and its allied species are the most numerous of all the inhabitants of the Houtmann’s Abrolhos, breeding in prodigious numbers; the bird lays in November and December, forming a nest of sea-weed about six inches in diameter, and varying in height from four to eight inches, but without anything like regularity of form; the top is nearly flat, there being but a very slight hollow to prevent the egg rolling off; for, like others of the *Sternidae*, they never lay but a single egg. The nests are so completely plastered with their excrement, that at first sight it appears to be almost the only material; they are either placed on the ground, in a clear open space, or on the tops of the thick scrub, over the *Sterna fuliginosa*: these two species incubate together in the utmost harmony, the bushes to an immense extent wearing a mottled appearance, from the great mass of birds of both species perched on the top; the male *Sterna fuliginosa* sitting quite close to the nest of the Noddy, while its mate is beneath, performing her arduous duties of incubation. On walking among these birds’ nests, I was surprised to observe the extreme tenacity with which they kept their post; in fact they would not remove off the egg or young, but suffered themselves to be fairly

* The head, feet and fore-arms were exhibited.

trod upon, or taken off by the hand; and so thickly were these nests placed, that it was no easy matter to avoid crushing either birds or eggs at every step. In the middle of January I found the eggs very nearly ready to hatch, and but few young birds; in numerous instances the bird would suffer me to take it by the wing and throw it off the nest, but would immediately return, although I was still standing close to the spot. There would be an overwhelming increase of this species yearly but for one check which nature has provided against it in the presence of a lizard, which is extremely abundant about their breeding-places, and which finds an easy prey in this and *S. fuliginosa*. I am satisfied, from constant observation, that on an average, not more than one out of every twenty birds hatched ever reach maturity, or live long enough to take wing; besides this, great numbers of the old birds are constantly killed: these lizards do not eat the whole bird, but merely extract the brains and vertebral marrow; the remainder however is soon cleared off by the *Dermestes lardarius*, which is here in amazing numbers, and gave me a great deal of uneasiness and constant trouble to preserve my collection from their repeated attacks. I did not observe the Noddy inhabiting any other but South Island; they do not appear to go far out to sea to feed, finding an abundance of food immediately outside the outer reef; nor did I in any one instance observe it feeding in the smooth quiet water between the outer reef and the islands. Their food consists of small fish, small mollusca, medusæ, cuttle-fish, &c. Irides brown, bill and legs blackish grey; flight somewhat heavy and very irregular."

"*Anous* — ? (Lesser Noddy).—This, although an allied species to the Noddy, is totally different in its habits of incubation, and is even much more numerous than the former; it builds a nest of seaweed on the branches of the mangrove, from four to ten feet above the ground; like the Noddy, however, it is truly gregarious, arranging their nests as closely as possible; the sea-weed is merely thrown across the branch without any regard to form, till they have a heap varying from two to four inches in height, the long pieces of seaweed in many instances hanging beneath the branch, which makes it appear a much larger structure: their nests and the branches of the trees are completely white from their excrement, throwing out a most disagreeable and sickly odour, which is perceptible at a considerable distance. Although there are large groves of mangroves on other islands, this bird only inhabits those of South Island. I have seen many vast flocks of birds, but I must confess I was not at all prepared for the surprise I experienced in witnessing the amazing clouds (literally speaking) which these birds present when congregating in the evening; while they had their young to feed, their departure and return with food during the day in one direction had a most singular appearance. From their breeding-place, across the smooth water to seaward, beyond the outer reef, is a distance of about four miles, and this entire distance, in their one and regular track, wore the appearance of one continuous dark line, from their prodigious numbers: after the young were